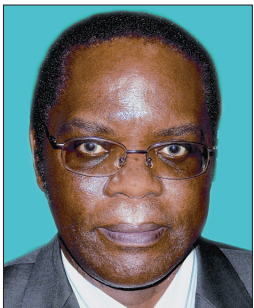


Transforming the telecoms sector

By **PROFESSOR JOHN NKOMA**

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JOHN NKOMA is Director General of the TCRA. As DG his responsibilities include the regulation of telecommunications, broadcasting, postal services, licensing, management of the radio frequency spectrum, numbering, electronic and other ICTs. Prior to joining TCRA he held posts as Professor of Physics, Dean of Science, Head of Department at the University of Botswana and Head of Physics at the University of Dar es Salaam. He holds BSc (UDSM), MSc (Essex) and PhD (Essex) degrees and certificates in telecommunications regulation, numbering, spectrum management and strategic management.

In a five-year period that has seen the transformation of Tanzania's telecoms sector under the aegis of the Tanzania Communications Regulatory Authority (TCRA), arguably the greatest landmark has been the arrival of the SEACOM and EASSY submarine telephony cables along the coast of East Africa over the last two years.

Inaugurating Tanzania's hookup to SEACOM in June 2009, President Jakaya Kikwete highlighted the impact that SEACOM, providing cheap, high-speed broadband cable, will have on his country. "With this technology in place, a doctor at Johns Hopkins Hospital in New York will be able to supervise and direct a doctor at Muhimbili Hospital through a complex operation that today requires one to travel to the United States," President Kikwete said.

Reflecting his close involvement in the SEACOM project, the President went on to outline his plans for e-government, as well commenting on the far-reaching advantages for the economy of being part of the global telecommunications revolution. The US\$650 million, 1.28 terabytes per second (Tb/s) 1,700 km cable system links southern and eastern Africa to global networks via India and Europe. Backhauls linking Johannesburg, Nairobi and Kampala with the coastal landing stations have been established and SEACOM is also working with its national partners to commission the final links to Kigali, Rwanda and Addis Ababa, Ethiopia shortly.

President Kikwete pointed out that cable opens up unprecedented opportunities, at a fraction of the current cost. Today, one megabyte per second (Mbps) connection per month costs between US\$2,500 and US\$5,000 but SEACOM plans to sell a megabyte at between US\$50 and US\$150. SEACOM, privately funded and three-quarters African owned, is expected to provide bandwidth on an open access basis, allowing all operators to have equal access to the cable.

The demand for broadband services will grow significantly over the next five years, partly driven by its use in business, education, and leisure, and partly by reductions in the prices of terminal equipment, especially handsets and personal computers. The proposed construction of the national fibre backbone network in Tanzania should provide direct connectivity between the regions of Tanzania to the submarine cables, thus extending quality and price improvements throughout the country.

Now that the cable has arrived in Tanzania, the government, in conjunction with the TCRA, will be pushing to roll out broadband access nationwide. The government anticipates that public-private partnerships will venture into developing nationwide backhaul terrestrial links to make the country part of the global village. To implement its goals, TCRA is developing an effective and efficient communications regulatory framework, while promoting efficiency among communications services providers and protecting consumer interests.

From a national economic perspective, the development of broadband services is highly desirable for the development of business, education, health services, and electronic government. The need for more investment in ICT services and infrastructure was clearly set out in the government's National Information and Communications Technologies Policy of March 2003, since given additional impetus with the setting up of the Universal Communications Service Access Fund.

In September 2005, the government, via the TCRA introduced a converged licensing framework and the concept of technology neutrality. It has worked and the mobile market in Tanzania has been growing at more than 60 per cent per year in the last five years and passed the 17 million subscriber mark in December 2009. Tanzania now has a fully competitive telecommunication sector with six operational mobile networks.

In 2006, TCRA also implemented a five-year Strategic Plan that synchronises its planning process and outlines TCRA's profile and direction. The plan provides a general outlook and identifies priority areas to reflect internal operational initiatives and the needs of stakeholders including government, consumers, investors, operators, and service providers. Underlying this strategic plan is the continuing dialogue and exchange of views among TCRA staff on key issues concerning the vision, mission, operations and future development of TCRA.

Clearly profitable, the telecommunications industry in Tanzania is generating income for its employees and profits for its shareholders. It creates employment for associated dealers, suppliers of services, and the companies that build and maintain fixed and wireless networks.

Businesses benefit from lower communications costs, which allows them to expand their markets and provide goods and services at more competitive prices. As GDP expands more rapidly, the government benefits from tax revenues levied on the telecommunications sector. **F**